

Area
[1298990]
 Machine Id
501072
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0118548	GFL0110673	GFL0088987
Sample Date		Client Info		21 Jun 2024	28 Mar 2024	21 Aug 2023
Machine Age	hrs	Client Info		14929	14468	13762
Oil Age	hrs	Client Info		600	0	0
Filter Age	hrs	Client Info		600	0	0
Oil Changed		Client Info		Changed	N/A	N/A
Filter Changed		Client Info		Changed	N/A	N/A
Sample Status				NORMAL	ABNORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>100	11	11	6
Chromium	ppm	ASTM D5185(m)	>20	<1	0	<1
Nickel	ppm	ASTM D5185(m)	>4	0	0	0
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)	>3	0	0	0
Aluminum	ppm	ASTM D5185(m)	>20	2	2	1
Lead	ppm	ASTM D5185(m)	>40	0	0	0
Copper	ppm	ASTM D5185(m)	>330	6	10	1
Tin	ppm	ASTM D5185(m)	>15	<1	<1	0
Vanadium	ppm	ASTM D5185(m)		0	0	0
White Metal	scalar	Visual*	NONE	VLITE	---	---
Yellow Metal	scalar	Visual*	NONE	NONE	---	---

CONTAMINATION

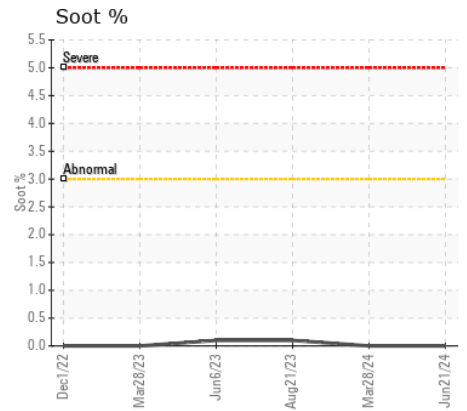
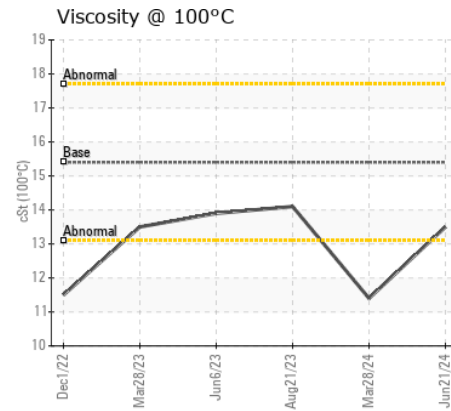
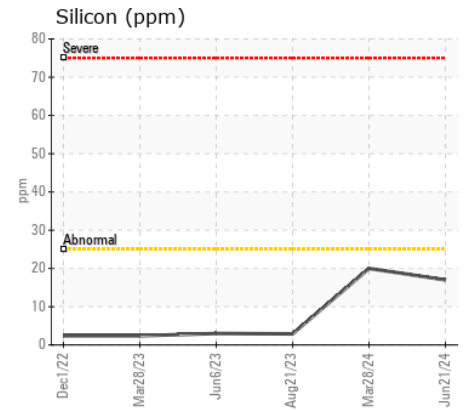
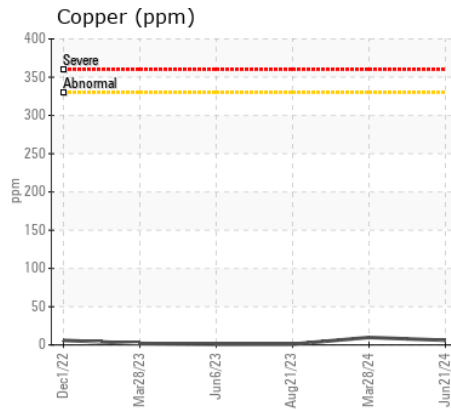
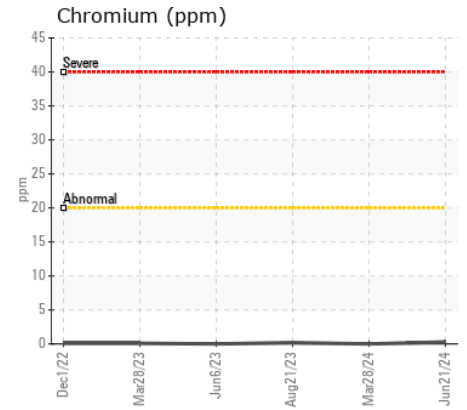
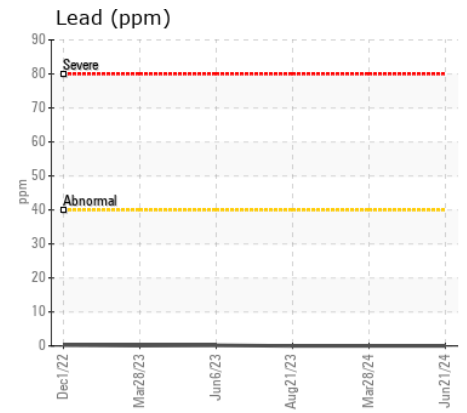
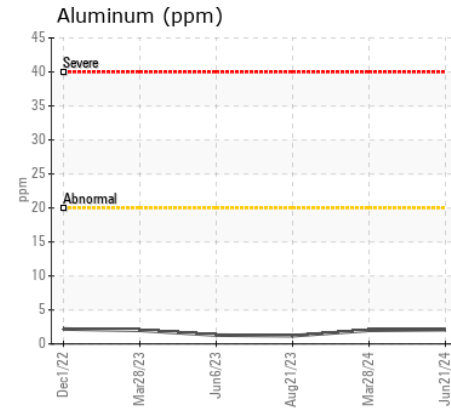
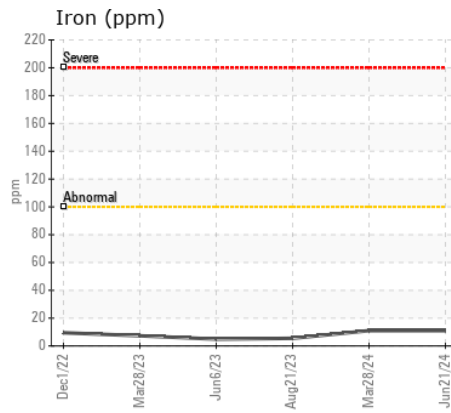
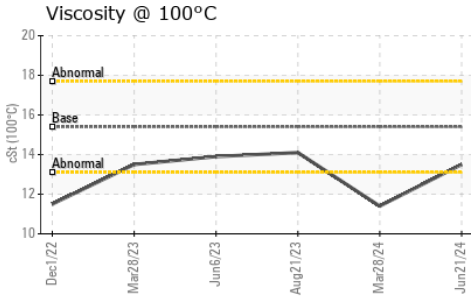
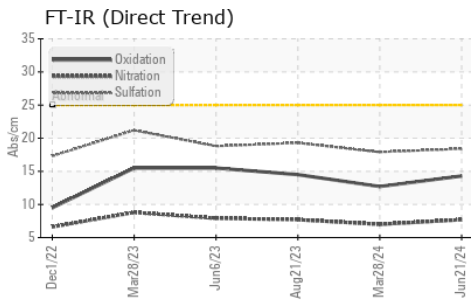
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	17	20	3
Potassium	ppm	ASTM D5185(m)	>20	6	15	<1
Fuel		WC Method	>5	<1.0	1	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	0.0	NEG
Soot %	%	ASTM D7844*	>3	0	0	0.1
Nitration	Abs/cm	ASTM D7624*	>20	7.7	7.0	7.7
Sulfation	Abs/.1mm	ASTM D7415*	>30	18.4	17.9	19.3
Silt	scalar	Visual*	NONE	NONE	---	---
Debris	scalar	Visual*	NONE	NONE	---	---
Sand/Dirt	scalar	Visual*	NONE	NONE	---	---
Appearance	scalar	Visual*	NORML	NORML	---	---
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG

FLUID CONDITION

The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)		6	15	<1
Boron	ppm	ASTM D5185(m)	0	10	64	3
Barium	ppm	ASTM D5185(m)	0	<1	<1	0
Molybdenum	ppm	ASTM D5185(m)	60	47	11	59
Manganese	ppm	ASTM D5185(m)	0	<1	0	<1
Magnesium	ppm	ASTM D5185(m)	1010	883	745	976
Calcium	ppm	ASTM D5185(m)	1070	1065	1261	1039
Phosphorus	ppm	ASTM D5185(m)	1150	912	746	1055
Zinc	ppm	ASTM D5185(m)	1270	1085	833	1168
Sulfur	ppm	ASTM D5185(m)	2060	2518	2553	2586
Oxidation	Abs/.1mm	ASTM D7414*	>25	14.3	12.7	14.5
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	13.5	▲ 11.4	14.1



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0118548
Lab Number : 02643962
Unique Number : 5801501
Test Package : MOB 1 (Additional Tests: Visual)

GFL Environmental - 207 - Pickering SW
 1034 TOY AVENUE, PICKERING YARD
 PICKERING, ON
 CA L1W 3P1
 Contact: Ian Patton
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 T: (905)831-6297
 F: (905)426-3577

To discuss this sample report, contact Customer Service at 1-800-268-2131.
 Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.
 Validity of results and interpretation are based on the sample and information as supplied.